



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.usplo.gov

DATE MAILED: 08/25/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,599	11/09/2000	Toshihiko Oda	197894US2	1501
22850 7	2850 7590 08/25/2004		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HILLERY, NATHAN	
			ART UNIT	PAPER NUMBER
			2176	

Please find below and/or attached an Office communication concerning this application or proceeding.

SV

Application No. Applicant(s) 09/708.599 ODA, TOSHIHIKO Office Action Summary Art Unit Examiner Nathan Hillery 2176 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). **Status** 1) Responsive to communication(s) filed on <u>30 April 2004</u>. 2b) This action is non-final. 2a) This action is **FINAL**. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-13 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-13 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) ____ are subject to restriction and/or election requirement. **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date _

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

4) Interview Summary (PTO-413)

6) Other: .

Paper No(s)/Mail Date. _____ .

5) Notice of Informal Patent Application (PTO-152)

Art Unit: 2176

DETAILED ACTION

- 1. This action is responsive to communications: Amendment filed on 4/30/04.
- 2. Claims 1 13 are pending in the case. Claims 1, 5, 9 and 10 are independent.
- 3. The rejection of claims 1 4 under 35 U.S.C. 101 as being nonstatutory has been maintained.
- 4. The rejection of claims 5 9 under 35 U.S.C. 101 as being nonstatutory has been withdrawn as necessitated by amendment.
- 5. The rejection of claims 1 13 under 35 U.S.C. 103(a) as being unpatentable has been withdrawn as necessitated by amendment.

Claim Rejections - 35 USC § 101

- 6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 7. Claims 1 4 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims can reflect a series of mental/manual steps. The claimed invention simply manipulates abstract ideas without practical application in the technological arts. Consequently, the claimed invention does not require the technical or useful arts and, thus, fails to define patentable subject matter. The rejection to these claims may be overcome by editing the preamble to recite, "A computer implemented method ...".
- 8. Claims 5 8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims refer to software per se and recite an apparatus that is not tangibly embodied to a computer system. Consequently, the

Art Unit: 2176

claimed invention does not require the technical or useful arts and, thus, fails to define patentable subject matter. The rejection to these claims may be overcome if an inference to some form of hardware is claimed.

- Question 9 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention amounts to functional descriptive data. Because the claims are means plus function, the claimed invention is considered software per se. Consequently, the claimed invention does not require the technical or useful arts and, thus, fails to define patentable subject matter. The rejection to these claims may be overcome if an inference to some form of hardware is claimed.
- 10. Further, to expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 103

- 11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 12. Claims 1 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loke et al. (Logic Programming with the World-Wide Web).
- 13. **Regarding independent claim 1**, Loke et al. teach that each visited page is parsed for its link information, which is stored as facts of the form link (<label>, <\URL>) ... Also, the located_at/2 facts of relevant pages are used as pointers to other pages to visit ... In general, more complex parsing can be carried out, and more complex link

Art Unit: 2176

relations constructed. Each located at/2 fact establishes a relationship between the page containing it and the page whose URL is an argument of the fact. This indicates how LP can be used to enrich the relationship between pages (page 8, second and third block paragraphs), which provide for describing an abstract link in the first document of the link source, the abstract link describing a link establishing condition for establishing a document link between the first document of the link source and the second document of the linking destination on a basis of retrieval of document information of the first document of the link source and the second document of the linking destination; and establishing a link between the first and the second documents based upon the retrieving and determining. Loke et al. do not explicitly teach retrieving and determining the second document satisfying the link establishing condition. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to retrieve and determine the second document satisfying the link establishing condition, since the user may want to develop a more complex and concrete relationship between the two documents and Loke et al. do teach that in general, more complex parsing can be carried out, and more complex link relations constructed (page 8, third block paragraph).

Regarding dependent claim 2, Loke et al. do not explicitly teach a Horn clause predicate expression. However, it would have been obvious to one with ordinary skill in the art at the time of the invention to recognize that demo(M, T#>G):- $T=m_id(URL)$, ... (page 6, under the Meta-Interpreter section) provides that the abstract link describes a nature of document elements of the first document of the link source

Art Unit: 2176

and the second document of the linking destination according to a Horn clause predicate expression.

- Regarding dependent claim 3, Loke et al. teach that the relevance measure of 15. a page is the number of mentions of the keywords from the initial list, or of keywords related to a keyword in the original list. This notion of `relatedness' is defined using related/2 facts. Each visited page is parsed for its link information, which is stored as facts of the form link (<label>, <URL>) ... Also, the located at/2 facts of relevant pages are used as pointers to other pages to visit ... In general, more complex parsing can be carried out, and more complex link relations constructed. Each located_at/2 fact establishes a relationship between the page containing it and the page whose URL is an argument of the fact. This indicates how LP can be used to enrich the relationship between pages ... Note that M is instantiated to different module identifiers upon backtracking, allowing a search through all the existing related/2 facts. As the set of related/2 facts grow, a call to path related/3 can succeed even if an earlier call with the same arguments failed (page 8, first block to fifth block), which provide for the abstract link derives document elements of the first document of the link source and the second document of the linking source documents satisfying the link establishing condition on a basis of a backtrack evaluation and a calculation to bind a variable based upon the document information retrieval.
- 16. **Regarding dependent claim 4**, Loke et al. do not explicitly teach **an atom predicate**. However, Loke et al. do teach that *the predicate web_load_doc/1 fetches the*Web page of the given URL and installs it (page 6, last block under the Meta-Interpreter

Art Unit: 2176

section). It would have been obvious to one with ordinary skill in the art at the time of the invention to know that **the abstract link is described using an atom predicate**, since the syntax of live clauses has been kept as close as possible to that of ordinary *Prolog* (page 6, first block under the Meta-Interpreter section).

- 17. **Regarding independent claim 5**, the claim incorporates substantially similar subject as claim 1 and is rejected along the same rationale.
- 18. **Regarding dependent claim 6**, the claim incorporates substantially similar subject as claim 2 and is rejected along the same rationale.
- 19. **Regarding dependent claim 7**, the claim incorporates substantially similar subject as claim 3 and is rejected along the same rationale.
- 20. **Regarding dependent claim 8**, the claim incorporates substantially similar subject as claim 4 and is rejected along the same rationale.
- 21. **Regarding independent claim 9**, the claim incorporates substantially similar subject as claim 1 and is rejected along the same rationale.
- 22. **Regarding independent claim 10**, the claim incorporates substantially similar subject as claim 1 and is rejected along the same rationale.
- 23. **Regarding dependent claim 11**, the claim incorporates substantially similar subject as claim 2 and is rejected along the same rationale.
- 24. **Regarding dependent claim 12**, the claim incorporates substantially similar subject as claim 3 and is rejected along the same rationale.
- 25. **Regarding dependent claim 13**, the claim incorporates substantially similar subject as claim 4 and is rejected along the same rationale.

Response to Arguments

26. Applicant's arguments filed 4/30/04 have been fully considered but they are not persuasive.

- 27. In response to Applicant's argument that the practical application of establishing a link between first and second documents (page 6, 4^{th} paragraph) makes the claimed invention (claims 1 4) statutory, it should be noted that establishing an abstract link can be completed by a mental/manual step when interpreted broadly.
- 28. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., The claimed invention provides the benefit of decreasing the labor of a description of a link by employing an "abstract link", page 7, 3rd paragraph) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- 29. In response to Applicant's argument that Loke does not teach an "abstract link", it should be noted that the Office has interpreted that phrase and the entire claimed invention in the broadest sense possible. Further, the Office is aware that the Applicant may not necessarily mean the particular interpretation used in the rejection of the claim(s) under 35 USC 103(a) but asserts that the broad interpretation used specifically above is within the scope of the claimed invention.

Art Unit: 2176

Conclusion

30. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (703) 305-4502. The examiner can normally be reached on M - F, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2176

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NH

SANJIV SHAH